REMARKS

Reconsideration is respectfully requested.

The Examiner's rejections will be considered in the order of their occurrence in the Office Action.

Paragraphs 1 through 4 of the Office Action

Claims 1, 10, 12, 15, and 17 have been objected to for the informalities noted in the Office Action.

Claims 1, 10, 12, 15, and 17 have been amended in a manner submitted to adopt the suggestions in the Office Action for further clarifying the requirements of these claims.

Withdrawal of the objections to claims 1, 10, 12, 15, and 17 is therefore respectfully requested.

Paragraphs 5 and 6 of the Office Action

Claims 1 through 18 have been rejected under 35 U.S.C. §102(b) as being anticipated by Stevens (U.S. Patent No. 4,213,246).

Claim 1, particularly as amended, requires "the dislodging means being impactable against the deflection gauge while the deflection gauge is positioned in the lumen of the pipe".

The rejection of claims 1 through 18 in the Office Action contends that the Stevens reference, and more particularly the "latch mechanism 26" of the Stevens apparatus, teaches the applicant's dislodging means of claims 1 through 18. Turning to the portions of the Stevens patent which were identified in the Office Action allegedly teaching the "deflection means" as defined in the claims, the Stevens patent states at col. 3, lines 40 through 51 (emphasis added):

> The releasable collar 14, which is rotatably and slidably mounted along the length of the shaft 12, is selectively

> prevented from sliding, but not from rotating, on the shaft by a latch mechanism 26. The latch mechanism 26 includes a lever 28 pivotally attached to the collar 14 and a catch arm 30 which is raised or lowered by movement of the lever. The catch arm 30 is adapted for engagement of a latch collar 32 which is firmly attached to the shaft 12. When the catch arm 30 engages the latch collar 32, the releasable collar 14 is prevented from sliding along the length of the shaft 12, but may still be freely rotated on the shaft.

It is noted that nothing in this portion of the Stevens patent teaches, or even remotely suggests, that the latch mechanism (or other portion of the Stevens apparatus) impacts, or is impactable against, any other portion of the Steven apparatus to help dislodge the apparatus from the lumen of a pipe when the gage becomes lodged in the pipe.

In order to anticipate the "dislodging means" of applicant's claim 1, the Stevens apparatus must have some structure that performs the "being impactable against the deflection gauge" function stated in the means plus function recitation of claim 1, and not just by structure that might perform the same overall purpose.

> The claims here define the invention in terms of several specific "means-plus-function" elements. The limitations which must be met by an anticipatory reference are those set forth in each statement of function. . . . Such a limitation cannot be met by an element in a reference that performs a different function, even though it may be part of a device embodying the same general overall concept.

RCA Corp. v. Applied Digital Data Sys., Inc., 221 USPQ 385, 389 n.5 (Fed. Cir. 1984) (emphasis added)

To the contrary, the description of the Stevens' latch mechanism (and the other portions of the Stevens apparatus) would seem to suggest the opposite of an impacting relationship between the lever 28, catch arm 30, and latch collar 32, as the catch arm engages, and *releases*, the latch collar to permit the releasable

collar to *slide* along the shaft, and collapse the apparatus to a smaller size. In the second portion of the Stevens patent that has been identified in the Office Action as supporting the rejection (at col. 3, lines 42 through 56), this becomes even clearer (emphasis added):

> A unique feature of the present invention is the fact that when the latch arm 30 is disengaged from the latch collar 32, the releasable collar 14 is free to slide along the length of the shaft 12. Thus, it will be appreciated that when the latch mechanism 26 is released, the releasable collar 14 may be slid along the length of the shaft 12 to a position on the shaft further removed from the adjustable collar 16. This greater separation of the adjustable collar 16 and the releasable collar 14 reduces the effective diameter of the cylindrical skeleton. When the releasable collar 14 is slid to the furtherest point possible on the shaft 12, the effective diameter of the cylindrical skeleton is only slightly greater than that of the shaft, thereby providing a collapsed configuration of the gage apparatus 10.

Moreover, the way or manner in which the gage apparatus of the Stevens patent is released from the interior of a pipe is completely different than the claimed dislodging means "being impactable against the deflection gauge while the deflection gauge is positioned in the lumen of the pipe". It is clear that the way in which the Stevens apparatus is able to be removed from tight spaces in a pipe is through the circumferential collapse and longitudinal lengthening of the gage that reduces the outer "effective" diameter of the gage to make it smaller and easier to move through the pipe.

It is therefore submitted that one of ordinary skill in the art, considering the Stevens teaching of a gage that is collapsible to a smaller diameter by the release and sliding of a collar along a shaft, would not be led to the claimed dislodging means which is impactable against the deflection gauge to release the gauge from a position of resistance.

In claim 2, it is submitted that, even though the releasable collar 14 of Stevens is slidable, nothing in the Stevens' patent teaches or suggests that the releasable collar 14 of Stevens is impactable against any other part of the Stevens' gage, and therefore it is submitted that one of ordinary skill in the art, considering the Stevens' disclosure, would not be led to a dislodging means that is impactable and slidable against the deflection gauge to facilitate dislodgement.

With regard to claim 3, against it is submitted that the releasable collar of Stevens, while movable in a direction that may be parallel to the longitudinal axis of the Stevens' gage, there is nothing in the Stevens' disclosure that suggests that the releasable collar impacts against anything.

With respect to claim 4, it appears that a rope may be used to release the catch mechanism 26 of Stevens, but nothing in the Stevens patent suggest that the catch mechanism is impactable against any other part of the Stevens gage.

In the case of applicant's claim 5, it is submitted that nothing in the Stevens gage is taught as impacting "the deflection gauge in a direction oriented substantially parallel to the longitudinal axis of the deflection gauge".

As to claim 6, nothing in Stevens is submitted to suggest a dislodging means that is impactable against the gauge and that includes "a slide member slidably mounted on the deflection gauge for sliding in a longitudinal direction oriented substantially parallel to the longitudinal axis of the deflection gauge".

It is also submitted that the claim 7 requirement of "the slide

member has a length greater than a distance between outer surfaces of the end plates of the deflection gauge" is not met by Stevens gage as the shaft 12 of Stevens does not meet the (claim 6) requirements of a slide member "slidably mounted on the deflection gauge", as Stevens' shaft 12 does not slide with respect to the remainder of the gage (note the threads of adjustable collar 16 which prevent sliding of the shaft with respect to the adjustable collar 16 of the gage).

With respect to claim 14, it is submitted that Stevens does not teach "each of the end plates [having] an aperture formed therein, and wherein the dislodging means comprises a slide member extending in and being freely slidable through the apertures of the end plates". The shaft 12 is not freely slidable through the adjustable collar 16, as the threads needed to adjust the outer diameter of the Stevens gage prevents any free sliding movement.

Claim 16 requires, in part, "the dislodging means being freely slidable with respect to all portions of the deflection gauge in a direction oriented substantially parallel to the longitudinal axis of the deflection gauge". As noted previously, it is clear that no portion of the Stevens apparatus is freely slidable with respect to all portions of the gauge, and therefore claim 16 is believed to be distinguishable over the Stevens reference.

Claim 18 includes many of the requirements discussed above, and it is submitted that the preceding remarks are equally applicable to the requirements of claim 18.

Withdrawal of the §102(b) rejection of claims 1 through 18 is therefore respectfully requested.

Added claims

Added claim 19 requires that "the deflection gauge has an outer calibrated diameter that is fixed in size and not adjustable", which it is submitted is completely contrary to the Stevens structure and the manner in which the Stevens gage collapses to be removed from the pipe.

Added claim 20 requires "the dislodging means is freely slidable with respect to all portions of the deflection gauge in the longitudinal direction of the deflection gauge" and it is submitted that the Stevens structure does not permit free sliding of any colorable dislodging means with respect to all portions of Stevens' gage.

Added claim 21 requires "wherein the dislodging means is impactable against the deflection gauge without varying a calibrated diameter of the deflection gauge along a circumference of the defection gauge". Again, this is submitted to be contrary to the entire approach of Stevens for releasing a gage from a pipe.

Added claims 22 through 25 define a deflection gauge and "an impacting means on the deflection gauge for impacting against the deflection gauge to dislodge the deflection gauge from a lodged condition in the lumen of the pipe", which for the reasons set forth above is submitted to be strange to the Stevens teaching.

VERSION WITH MARKINGS TO SHOW CHANGES MADE:

In the Claims (bracketed parts deleted and underline parts added):

1. (Amended) A deflection gauge with a dislodging system comprising:

an elongate deflection gauge for measuring a minimum diameter of a lumen of a pipe; and

dislodging means for dislodging the deflection gauge from a lodged condition in the lumen of [a] the pipe, the dislodging means being [adapted to impact] impactable against the deflection gauge while the deflection gauge is positioned in the lumen of the pipe.

2. (Amended) The deflection gauge with dislodging system of claim 1 wherein the dislodging means is movably mounted on the deflection gauge such that the dislodging means is slidable with respect to the deflection gauge.

3. (Pending) The deflection gauge with dislodging system of claim 1 wherein the dislodging means is movable with respect to the deflection gauge in a direction oriented substantially parallel to the longitudinal axis of the deflection gauge.

4. (Pending) The deflection gauge with dislodging system of claim 1 wherein the dislodging means is slidably movable with respect to the deflection gauge by pulling a cord when the cord is connected to the dislodging means.

5. (Amended) The deflection gauge with dislodging system of claim 1 wherein the dislodging means [is adapted to impact] impacts the deflection gauge in a direction oriented substantially parallel to the longitudinal axis of the deflection gauge.

6. (Amended) The deflection gauge with dislodging system of claim 1 wherein the dislodging means includes a slide member slidably mounted on the deflection gauge for sliding in a longitudinal direction oriented substantially parallel to the longitudinal axis of the deflection gauge, the slide member having opposite ends.

7. (Pending) The deflection gauge with dislodging system of claim 6 wherein the deflection gauge includes a pair of spaced end plates, and wherein the slide member has a length greater than a distance between outer surfaces of the end plates of the deflection gauge.

8. (Pending) The deflection gauge with dislodging system of claim 6 wherein the deflection means includes a stop member mounted on the slide member for limiting sliding movement of the slide member with respect to the deflection gauge.

9. (Pending) The deflection gauge with dislodging system of claim 8 wherein the stop member is mounted at an end of the slide member.

10. (Amended) The deflection gauge with dislodging system of claim 8 wherein [a pair of] the stop [members] member and another stop member are mounted on the slide member with [the pair of] each stop [members being] is mounted [on] adjacent to an opposite [ends] end of the slide member.

11. (Pending) The deflection gauge with dislodging system of claim 6 wherein the dislodging means includes a hook mounted on the slide member for connecting a cord thereto.

12. (Amended) The deflection gauge with dislodging system

of claim 11 wherein [a pair of] the [hooks] hook and another hook are mounted on the slide member with [the pair of hooks being] each slide member is mounted on an opposite [ends] end of the slide member.

13. (Pending) The deflection gauge with dislodging system of claim 1 wherein the deflection gauge comprises a pair of longitudinally separated end plates and a plurality of skid members extending between the end plates.

14. (Amended) The deflection gauge with dislodging system of claim 13 wherein each of the end plates has an aperture formed therein, and wherein the dislodging means comprises a slide member extending in and being freely slidable through the apertures of the end plates.

15. (Amended) The deflection gauge with dislodging system of claim 13 wherein radially outermost surfaces of the skid members defining a calibrated diameter along a circumference of the [defection] deflection gauge.

16. (Amended) A deflection gauge with a dislodging system comprising:

a deflection gauge for measuring a minimum diameter of a lumen of a pipe, the deflection gauge comprising a pair of longitudinally separated end plates, each of the end plates having an aperture formed therein and a plurality of skid members extending between the end plates, radially outermost surfaces of the skid members defining a calibrated diameter along a circumference of the defection gauge; and

dislodging means for dislodging the deflection gauge from a lodged condition in the lumen of a pipe, the dislodging means being

[adapted to impact] impactable against the deflection gauge in a longitudinal direction of the deflection gauge while the deflection gauge is positioned in the lumen of the pipe, the dislodging means being movably mounted on the deflection gauge, the dislodging means being [movable] freely slidable with respect to all portions of the deflection gauge in a direction oriented substantially parallel to the longitudinal axis of the deflection gauge.

17. (Amended) The deflection gauge with dislodging system of claim 16 wherein the dislodging means comprises:

a slide member slidably mounted on the deflection gauge, the slide member being elongate with opposite ends;

a pair of stop members being mounted on the slide member with the pair of stop members with each stop member being mounted on an opposite [ends] end of the slide member; and

a pair of hooks being mounted on the slide member with the pair of hooks with each hook being mounted on one of the opposite ends of the slide member.

18. (Pending) A deflection gauge with a dislodging system comprising:

an elongate deflection gauge for measuring a minimum diameter of a lumen of a pipe, the deflection gauge comprising:

a pair of longitudinally separated end plates, each of the end plates having an aperture formed therein; and

a plurality of skid members extending between the end plates, each of the skid members having opposite ends with each of the ends being mounted on one of the end plates, radially outermost surfaces of the skid members defining a calibrated diameter along a circumference of the defection gauge; and

dislodging means for dislodging the deflection gauge from a

lodged condition in the lumen of a pipe, the dislodging means being adapted to impact against the deflection gauge while the deflection gauge is positioned in the lumen of the pipe, the dislodging means being movably mounted on the deflection gauge, the dislodging means being movable with respect to the deflection gauge in a direction oriented substantially parallel to the longitudinal axis of the deflection gauge, the dislodging means being slidably movable with respect to the deflection gauge by pulling a cord when the cord is connected to the dislodging means, the dislodging means being adapted to impact the deflection gauge in a direction oriented substantially parallel to the longitudinal axis of the deflection gauge, the dislodging means comprising:

a slide member slidably mounted on the deflection gauge, the slide member being elongate with opposite ends, the slide member having a length greater than a distance between outer surfaces of the end plate of the deflection gauge;

a pair of stop members being mounted on the slide member for limiting sliding movement of the slide member with respect to the deflection gauge, the pair of stop members being mounted on opposite ends of the slide member, each of the stop members being mounted at one of the ends of the slide member, the stop member comprising a plate, the plate lying in a plane oriented substantially perpendicular to the longitudinal axis of the slide member; and

a pair of hooks being mounted on the slide member with the pair of hooks being mounted on opposite ends of the slide member, each of the hooks being mounted on one of the ends of the slide member and extending away from the slide member along the longitudinal axis of the slide member, each of the hooks being located longitudinally outward of the stop

member, each of the hooks comprising a closed loop.

Please add the following claims:

19. (Added) The deflection gauge with dislodging system of claim 1 wherein the deflection gauge has an outer calibrated diameter that is fixed in size and not adjustable.

20. (Added) The deflection gauge with dislodging system of claim 1 wherein the dislodging means is freely slidable with respect to all portions of the deflection gauge in the longitudinal direction of the deflection gauge.

21. (Added) The deflection gauge with dislodging system of claim 1 wherein the dislodging means is impactable against the deflection gauge without varying a calibrated diameter of the deflection gauge along a circumference of the defection gauge

22. (Added) A deflection gauge system comprising:

an elongate deflection gauge for measuring a minimum diameter of a lumen of a pipe; and

impacting means on the deflection gauge for impacting against the deflection gauge to dislodge the deflection gauge from a lodged condition in the lumen of the pipe.

23. (Added) The deflection gauge system of claim 22 wherein the impacting means includes sliding means for freely sliding with respect to the deflection gauge.

24. (Added) The deflection gauge system of claim 23 wherein the impacting means includes limiting means for limiting sliding of the sliding means with respect to the deflection gauge.

25. (Added) The deflection gauge system of claim 24 wherein the limiting means impacts the deflection gauge when the limiting means limits sliding of the sliding means with respect to the deflection gauge.

CONCLUSION

In light of the foregoing amendments and remarks, early reconsideration and allowance of this application are most courteously solicited.

Respectfully submitted,

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